



#### PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q94801

Hiroshi SAKURAI, et al.

Appln. No.: 10/578,776

Group Art Unit: UNKNOWN

Confirmation No.: 6191

Examiner: UNKNOWN

Filed: May 9, 2006

For:

CARBON FIBER NONWOVEN FABRIC, AND PRODUCTION METHOD AND USE

**THEREOF** 

# INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§ 1.97 and 1.98

### MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith, except for the following: U.S. patents and/or U.S. patent publications; and co-pending non-provisional U.S. applications filed after June 30, 2003.

The present Information Disclosure Statement is being filed no later than three months from the application's filing date, and therefore no Statement under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

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Documents 10 - 17 noted below were previously cited in the Information Disclosure Statement filed May 9, 2006, as documents that were cited in International Search Report; copies and English language Abstracts thereof have been obtained and are provided herewith.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following:

- 1. The disclosure on page 2 of the present specification and the submission of an English language abstract for JP-A 62-90863 each constitutes a concise statement of relevance of JP-A 62-90863; furthermore, U.S. Patent 4,668,595 cited herein corresponds to the JP 62-90863.
- 2. The disclosure on page 3 of the present specification and the submission of an English language abstract for JP-A 8-119614 each constitutes a concise statement of relevance of JP-A 8-119614; furthermore, U.S. Patent 5,956,225 cited herein corresponds to the JP 8-119614.
- 3. The disclosure on page 4 of the present specification and the submission of an English language abstract of A. NAGAE, *POROSITY CONTROL AND ABSORPTION*PROPERTIES OF POROUS CARBONS PREPARED FROM PHENOL RESIN, Summary of the 29<sup>th</sup> Carbon Society Annual Meeting (2002), pages 92 93 (NAGAE) each constitutes a concise statement of relevance of NAGAE.
- 4. The disclosure on page 4 of the present specification and the English language abstract of JP-A 2002-363858 submitted herewith each constitutes a concise statement of relevance of JP-A 2002-363858.

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5. The disclosure on page 5 of the present specification and the English language abstract of JP-A 2003-033666 submitted herewith each constitutes a concise statement of relevance of JP-A 2003-03366.

- 6. The disclosure on page 6 of the present specification and the submission of an English language abstract of JP-B 2641712 each constitutes a concise statement of relevance of JP-B 2641712; furthermore, U.S. Patent 5,578,543 cited herein corresponds to JP-B 2641712.
- 7. The disclosure on page 7 of the present specification and the submission of an English language abstract of JP-B 3034027 each constitutes a concise statement of relevance of JP-B 3034027; furthermore, U.S. Patent 5,611,964 cited herein corresponds to JP-B 3034027.
- 8. The disclosure on page 7 of the present specification and the submission of an English language abstract of JP-B 2640183 each constitutes a concise statement of relevance of JP-B 2640183.
- 9. The disclosure on page 7 of the present specification and the submission of an English language abstract of JP-A 2000-8227 submitted herewith constitutes a concise statement of relevance of JP-A 2000-8227.
- 10. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English language abstract for JP-A 1-282325 each constitutes a concise statement of relevance of JP-A 1-282325.
- 11. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English

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language abstract for JP-A 2002-285457 each constitutes a concise statement of relevance of JP-A 2002-285457.

- 12. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English language abstract for WO 98/38140 each constitutes a concise statement of relevance of WO 98/38140.
- 13. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English language abstract for JP-B 2646140 each constitutes a concise statement of relevance of JP-B 2646140.
- 14. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English language abstract for JP-A 5-195396 each constitutes a concise statement of relevance of JP-A 5-195396.
- 15. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English language abstract for JP-A 3-8811 each constitutes a concise statement of relevance of JP-A 3-8811.
- 16. The previously noted indication in the International Search Report of the degree of relevance found by the foreign patent office, and the present submission of an English

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language abstract for JP-A 11-335930 each constitutes a concise statement of relevance of JP-A

11-335930.

The previously noted indication in the International Search Report of the degree 17.

of relevance found by the foreign patent office, and the present submission of an English

language abstract for JP-A 2004-176236 each constitutes a concise statement of relevance of JP-

A 2004-176236.

The submission of the listed documents is not intended as an admission that any such

document constitutes prior art against the claims of the present application. Applicant does not

waive any right to take any action that would be appropriate to antedate or otherwise remove any

listed document as a competent reference against the claims of the present application.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: August 3, 2006

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Substitute for Form 1449 A & B/PTO

## INFORMATION DISCOSLIBE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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|-------|---|----|---|--|
| Sheet | 1 | of | 2 |  |

| Сотр                   | olete if Known  |  |
|------------------------|-----------------|--|
| Application Number     | 10/578,776      |  |
| Confirmation Number    | 6191            |  |
| Filing Date            | May 9, 2006     |  |
| First Named Inventor   | Hiroshi SAKURAI |  |
| Art Unit               | UNKNOWN         |  |
| Examiner Name          | UNKNOWN         |  |
| Attorney Docket Number | Q94801          |  |

| U.S. PATENT DOCUMENTS |       |              |                                   |                  |   |  |  |
|-----------------------|-------|--------------|-----------------------------------|------------------|---|--|--|
| Framinar              | Cite  | Document     | Number                            | Publication Date |   |  |  |
| Examiner<br>Initials* | No.1  | Number       | Kind Code <sup>2</sup> (if known) | MM-DD-YYYY       | Name of Patentee or Applicant of Cited Document |  |  |
|                       | ••    | US 4,668,595 |                                   | 05-26-1987       | Toshino et al.                                  |  |  |
|                       |       | US 5,956,225 |                                   | 09-21-1999       | Okuyama et al.                                  |  |  |
|                       | -1100 | US 5,578,543 |                                   | 11-26-1996       | Tennent et al.                                  |  |  |
|                       |       | US 5,611,964 |                                   | 03-18-1997       | Friend et al.                                   |  |  |
|                       |       | US           |                                   |                  |   |  |  |

|           |      |                              | F                   | OREIGN PA                         | TENT DOCUM          | ENTS                                      |  |
|-----------|------|------------------------------|---------------------|-----------------------------------|---------------------|---|--|
| Examiner  | Cite | Cite Foreign Patent Document |                     | Publication Date                  | Name of Patentee or |   |  |
| Initials* | No.1 | Country<br>Code <sup>3</sup> | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) | MM-DD-YYYY          | Applicant of Cited Document               | Translation <sup>6</sup>                             |
|           |      | JP                           | 62-90863            | A                                 | 04-25-1987          | ASAHI CHEMICAL CO LTD                     | Spec, Abstract and corresponds to USP '595           |
|           |      | JP                           | 8-119614            | A                                 | 05-14-1996          | MITSUBISHI CHEM CORP                      | Spec.,<br>Abstract and<br>corresponds<br>to USP '225 |
|           |      | JP                           | 2002-363858         | А                                 | 12-18-2002          | KURIHARA HIDENORI; SANYO<br>ELECTRIC CO   | Spec. and<br>Abstract                                |
|           |      | JP                           | 2003-33666          | А                                 | 02-04-2003          | DENSO CORP; NAT INST OF ADV IND & TECHNOL | Spec. and<br>Abstract                                |
|           |      | JP Patent<br>No.             | 2641712             | В                                 |                     |   | Spec. and<br>Corresponds<br>to USP '543              |
|           |      |                              |                     |                                   |                     |   |  |

| Examiner<br>Initials* | Cite<br>No.1 | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published. | Translation <sup>6</sup> |
|-----------------------|--------------|--|--------------------------|
|                       |              | A. NAGAE et al, POROSITY CONTROL AND ABSORPTION PROPERTIES OF POROUS CARBONS PREPARED FROM PHENOL RESIN, Summary of the 29 <sup>th</sup> Carbon Society Annual Meeting (2002), pages 92 - 93   | Abstract                 |
|                       |              | A. OYA et al, PREPARATION OF THIN CARBON FIBERS FROM PHENOL-FORMALDEHYDE POLYMER MICRO-BEADS DISPERSED IN POLYETHYLENE MATRIX, Carbon 38, (2000), pages 1141-1144  |                          |
|                       | -            |  |                          |

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| Examiner Signature | Date Considered |  |

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.

Complete if Known Substitute for Form 1449 A & B/PTO 10/578,776 Application Number INFORMATION DECL 6191 Confirmation Number Filing Date May 9, 2006 STATEMENT BY APPLICANT First Named Inventor Hiroshi SAKURAI UNKNOWN (use as many sheets as necessary) Art Unit **UNKNOWN** Examiner Name of 2 Attorney Docket Number Q94801 2 Sheet

|           |      |                 | U.S. 1                            | PATENT DOCUME    | ENTS  |
|-----------|------|-----------------|-----------------------------------|------------------|---|
| Examiner  | Cite | Document Number |                                   | Publication Date |   |
| Initials* | No.1 | Number          | Kind Code <sup>2</sup> (if known) | MM-DD-YYYY       | Name of Patentee or Applicant of Cited Document |
|           |      | US              |                                   |                  |   |
|           |      | US              |                                   |                  |   |
|           |      | US              |                                   |                  |   |

|                | FOREIGN PATENT DOCUMENTS     |                         |                                   |            |                             |                          |   |  |  |
|----------------|------------------------------|-------------------------|-----------------------------------|------------|-----------------------------|--------------------------|---|--|--|
| Examiner       | Cite                         | Foreign Patent Document |                                   |            | Publication Date            | Name of Patentee or      |   |  |  |
| Initials* No.1 | Country<br>Code <sup>3</sup> | Number <sup>4</sup>     | Kind Code <sup>5</sup> (if known) | MM-DD-YYYY | Applicant of Cited Document | Translation <sup>6</sup> |   |  |  |
|                |                              | JP Patent<br>No.        | 3034027                           | В          |                             |                          | Spec. and<br>Correspond<br>s to USP<br>'964 |  |  |
|                | -                            | JP Patent<br>No.        | 2640183                           | В          |                             |                          | Spec and<br>Abstract                        |  |  |
|                |                              | JP Patent<br>No.        | 2000-8227                         | A          | 01-11-2000                  |                          | Spec and<br>Abstract                        |  |  |
|                |                              | JP                      | 1-282325                          | А          | 11-14-1989                  | TORAY INDUSTRIES, INC.   | ISR and<br>Abstract                         |  |  |
|                |                              | JP                      | 2002-285457                       | А          | 10-03-2002                  | OSAKA GAS CO., LTD.      | ISR and<br>Abstract                         |  |  |
|                |                              | wo                      | 98/38140                          | А          | 09-30-1998                  | OSAKA GAS CO., LTD.      | ISR and<br>Abstract                         |  |  |
|                |                              | JP Patent<br>No.        | 2646140                           | В          | 08-25-1997                  | PETOCA, LTD.             | ISR and<br>Abstract                         |  |  |
|                |                              | JP                      | 5-195396                          | А          | 08-03-1993                  | PETOCA, LTD.             | ISR and<br>Abstract                         |  |  |
|                |                              | JP                      | 3-8811                            | А          | 01-16-1991                  | PETOCA, LTD.             | ISR and<br>Abstract                         |  |  |
|                |                              | JP                      | 11-335930                         | А          | 12-07-1999                  | PETOCA, LTD.             | ISR and<br>Abstract                         |  |  |
|                |                              | JP                      | 2004-176236                       | Α          | 06-24-2004                  | TEIJIN LTD.              | ISR and<br>Abstract                         |  |  |

|                       | NON PATENT LITERATURE DOCUMENTS |  |                          |  |  |  |  |
|-----------------------|---------------------------------|--|--------------------------|--|--|--|--|
| Examiner<br>Initials* | Cite<br>No.1                    | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published. | Translation <sup>6</sup> |  |  |  |  |
|                       |                                 |  |                          |  |  |  |  |
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| Examiner Signature | <br><del></del> | Date Considered |   |
|--------------------|-----------------|-----------------|---|
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kind Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or follow the hyperlink from the title of the document to the intranet. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to indicate here if English language Translation is attached.